

Application No. 10/661,817  
Reply dated December 29, 2005  
Reply to Office Action of September 29, 2005

### **AMENDMENTS TO THE CLAIMS**

The listing of claims will replace all prior versions and listings of claims in the application.

#### **Listing of Claims:**

1-9. *(Canceled)*

10. *(Currently Amended)* ~~Apparatus~~ An apparatus at a draw frame having a drawing mechanism for the doubling and drafting of fibre slivers, having a drawing mechanism frame for accommodating the drawing mechanism, which has at least two pairs of rollers each comprising an upper roller and a lower roller, having means for adjusting the spacing of at least one of the lower rollers in relation to another lower roller, in each case having a mounting device for accommodating the lower roller, wherein lower rollers are arranged to be driven by at least one drive element endlessly revolving around pulley wheels, ~~characterised in that~~ wherein at least one pulley wheel (~~40, 41, 42, 43, 44, 45, 46; 51~~) and the tensioned drive element (~~47~~) are used for adjusting the mounting device (~~33a, 33b; 34a, 34b; 35a, 35b; 36a, 36b~~), wherein a moving force applied to the pulley wheel (~~40, 41, 42, 43, 44, 45, 46; 51~~) or to the drive element (~~47~~) can be converted into the adjusting movement for the mounting device (~~33a, 33b; 34a, 34b; 35a, 35b; 36a, 36b~~).

11. *(Currently Amended)* ~~Apparatus~~ The apparatus according to claim 10, ~~characterised in that~~ wherein the drive element is stationary and the pulley wheel is rotated.

12. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the pulley wheel is stationary and the drive element is moved.

13. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein at least one guide pulley wheel and at least one roller-driving pulley wheel are attached to each ~~slider (mounting)~~ mounting device; and the at least one roller-driving pulley wheel or guide pulley wheel (s) act, in each case one after the other, on both sides of the tensioned drive element.

14. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the rotation of the pulley wheel or the movement of the drive element is accomplished manually.

15. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the slider mounting device is linearly displaceable.

16. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the drive element is a toothed belt.

17. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ further comprising an endless flexible toothed belt ~~is present~~.

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18. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the pulley wheels comprise toothed belt wheels.

19. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the pulley wheels comprise guide pulley wheels.

20. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ further comprising at least one driving pulley wheel ~~is provided~~.

21. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ further comprising driven pulley wheels ~~are present~~.

22. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the drive element loops around the pulley wheels.

23. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the drive element and the pulley wheels are in engagement with one another.

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24. **(Currently Amended) Apparatus** The apparatus according to claim 10, characterised in that wherein the pulley wheel for adjustment of a ~~slider~~ the mounting device is ~~the a~~ drive pulley wheel of a lower roller (~~roller driving pulley wheel~~).

25. **(Currently Amended) Apparatus** The apparatus according to claim 10, characterised in that wherein the slider mounting device is displaceable during adjustment.

26. **(Currently Amended) Apparatus** The apparatus according to claim 10, characterised in that wherein the slider mounting device is arranged to be stopped.

27. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 26, characterised in that wherein the stopping arrangement is releasable.

28. **(Currently Amended) Apparatus** The apparatus according to claim 10, characterised in that further comprising a display device for the position of the ~~slider is present~~ mounting device.

29. **(Currently Amended) Apparatus** The apparatus according to claim 10, characterised in that further comprising a drive motor is used for rotation of the pulley wheel.

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30. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ further comprising a drive motor is used for movement of the drive element.

31. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that the~~ further comprising a drive motor is used for the lower rollers.

32. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ further comprising a separate drive motor ~~is used~~.

33. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 16, ~~characterised in that~~ wherein belt shortening or belt lengthening is arranged to be automatically evened out during adjustment.

34. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 33, ~~characterised in that~~ wherein the evening-out of belt length is carried out at a slider by two guide pulley wheels.

35. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the lower rollers are arranged to be adjusted singly and independently of one another.

36. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein a roller-driving pulley wheel and a guide pulley wheel are attached to ~~the~~ a slider of ~~the~~ an intake roller and a roller-driving pulley wheel and a guide pulley wheel are attached to ~~the~~ a slider of ~~the~~ a middle roller.

37. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 36, ~~characterised in that~~ wherein the drive element runs around the pulley wheels at the slider of the intake roller and around the pulley wheels at the slider of the middle roller in a mirror-reflected arrangement.

38. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the drive element is in tension ~~before, during and after the~~ displacement.

39. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 29, ~~characterised in that~~ wherein the drive motor is in communication with an electronic control and regulation device.

40. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 39, ~~characterised in that~~ wherein a measuring element is connected to the control and regulation device.

41. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 40, characterised in that wherein the measuring element is capable of registering fibre-related and/or machinery-related measurement variables.

42. **(Currently Amended) Apparatus** The apparatus according to claim 10, characterised in that wherein adjustment of the ~~slider~~ mounting device is carried out when the draw frame is in operation.

43. **(Currently Amended) Apparatus** The apparatus according to claim 10, characterised in that wherein adjustment of the ~~slider~~ mounting device is carried out when the draw frame is not in operation.

44. **(Currently Amended) Apparatus** The apparatus according to claim 10, characterised in that wherein adjustment of the ~~slider~~ mounting device is carried out during can-changing.

45. **(Currently Amended) Apparatus** The apparatus according to claim 10, characterised in that wherein the draw frame is self-adjusting.

46. **(Currently Amended) Apparatus** The apparatus according to claim 10, characterised in that wherein adjustment of the ~~slider~~ mounting device is carried out by inputting adjustment variables.

47. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 46,  
~~characterised in that~~ wherein the adjustment variables can be input manually.

48. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 39,  
~~characterised in that~~ wherein a memory for adjustment variables is connected to the control and  
regulation device.

49. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 36,  
~~characterised in that~~ wherein the slider for the intake roller and the slider for the middle roller are  
arranged to be connected by a rigid connecting element.

50. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 49,  
~~characterised in that~~ wherein the connecting element is releasably connected.

51. **(Currently Amended) Apparatus** The apparatus according to claim 10,  
~~characterised in that~~ wherein the spacing of the pairs of rollers in relation to one another can be  
adjusted without fibre material.

52. **(Currently Amended) Apparatus** The apparatus according to claim 10,  
~~characterised in that~~ wherein the spacing of the pairs of rollers in relation to one another can be  
adjusted with fibre material.



53. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the extent of the ~~a~~ preliminary draft zone can be adjusted.

54. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the extent of the ~~a~~ main draft zone can be adjusted.

55. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the extent of the ~~a~~ preliminary draft zone and the extent of the ~~a~~ main draft zone can be adjusted.

56. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein each lower roller has its own associated drive motor.

57. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 36, ~~characterised in that~~ wherein the intake and middle lower rollers are arranged to be driven by one drive motor.

58. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 12, ~~characterised in that~~ wherein a brake[[,]] or a stopping arrangement ~~or the like~~ is associated with the stationary pulley wheel.

59. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ further comprising a mechanical brake[[,]] or a stopping arrangement ~~or the like is present.~~

60. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ further comprising an electrical brake[[,]] or a stopping arrangement ~~or the like is present.~~

61. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 29, ~~characterised in that~~ wherein the drive motor is a self-braking motor.

62. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ further comprising an electromagnetic brake[[,]] or a stopping arrangement ~~or the like is present.~~

63. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 29, ~~characterised in that~~ wherein the drive motor drives a further drive train, which has a free-wheel arrangement ~~or the like.~~

64. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the at least two drawing mechanism roller combinations include at

least three drawing mechanism roller combinations ~~are present~~, of which at least two are so mounted that they can be adjusted.

65. **(Currently Amended) Apparatus** The apparatus according to claim 10, ~~characterised in that~~ wherein the mounting device consists of ~~the~~ a mounting (~~33a, 33b, 34a, 34b~~) and ~~the~~ a slider (~~35a, 35b, 36a, 36b~~).

66. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 65, ~~characterised in that~~ wherein the mounting (~~33a, 33b, 34a, 34b~~) and the slider (~~35a, 35b, 36a, 36b~~) are fastened to one another, for example by bolts.

67. **(Currently Amended) Apparatus** The apparatus according to claim ~~10~~ 65, ~~characterised in that~~ wherein the mounting (~~33a, 33b, 34, 34b~~) and the slider (~~35a, 35b, 36a, 36b~~) are of integral construction.

68. **(New)** A method for adjusting nip line spacing in a drawing mechanism of a draw frame for fibre slivers, the drawing mechanism including at least two adjustable mounting devices defining a nip line spacing therebetween, each mounting device including at least one lower roller and at least one upper roller adjustably loaded on top of the lower roller, and at least one of the at least two mounting devices including a pulley wheel in driving connection with a driving element, the method comprising:

unlocking at least one of the at least two mounting devices;

adjusting the nip line spacing between the at least two mounting devices via the drive element; and

relocking the at least one of the at least two mounting devices.

69. *(New)* The method according to claim 68, further comprising unloading the upper rollers of each mounting device before performing the steps of unlocking, adjusting, and relocking.

70. *(New)* The method according to claim 68, further comprising inserting the fibre slivers into the drawing mechanism before performing the steps of unlocking, adjusting, and relocking.

71. *(New)* The method according to claim 68, wherein the at least two mounting devices include first and second mounting devices, the drawing mechanism further comprising a third mounting device including a delivery roller combination, the nip line spacing between the first mounting device and the second mounting device defining a preliminary draft zone, and the nip line spacing between the second mounting device and the third mounting device defining a main draft zone, the method further comprising

adjusting the nip line spacing in at least one of the preliminary draft zone and the main draft zone via the drive element; and

simultaneously or subsequently, drawing straight a sagging fibre sliver loop in the main draft zone.

72. **(New)** The method according to claim 71, further comprising rotating the delivery roller combination in a work direction to draw straight the sagging fibre sliver loop.

73. **(New)** The method according to claim 71, further comprising rotating the delivery roller combination contrary to a work direction to form the sagging fibre sliver loop.

74. **(New)** An adjustable drawing mechanism in a draw frame for fibre slivers, the adjustable drawing mechanism comprising:

at least two adjustable mounting devices defining a nip line spacing therebetween, each mounting device including

at least one lower roller; and

at least one upper roller adjustably mounted on top of the lower roller,

wherein at least one of the at least two mounting elements includes a pulley wheel in driving connection with a driving element, the pulley wheel and the driving element being adapted to adjust the nip line spacing of at least one of the at least two mounting devices in relation to another of the at least two mounting devices.

75. **(New)** The adjustable drawing mechanism according to claim 74, further comprising a stopping arrangement configured to stop the drive element, the pulley wheel being adapted to rotate.

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76.     **(New)** The adjustable drawing mechanism according to claim 74, further comprising a stopping arrangement configured to stop the pulley wheel, the drive element being adapted to move.